ABSTRACT

[066] The present invention is directed to a process of isolating an extract from a Euphorbaciae obesa (EO) plant by: preparing a sample of said plant comprising removal of the latex material; dissolving said sample with first solvent to form a solution; separating said solution into a liquid and a pulp fraction; and purifying said pulp fraction. The isolated EO extract induces apoptosis and inhibits growth of a cancerous cell. Thus, the present invention is also directed to a method for inducing apoptosis and growth inhibition of a cancerous cell by contacting the cell with an effective amount of the EO extract by the process of the invention. Preferably, the extract is administered both to the tumor directly and intravenously. The preferred lines of cancerous cells are melanoma, non-small cell lung cancer, prostate cancer, breast carcinoma, ovarian cancer, lymphoma and leukemia cells.